

ABSTRACT OF THE DISCLOSURE

METHOD, APPARATUS, AND PROGRAM FOR SEPARATE REPRESENTATIONS OF FILE SYSTEM LOCATIONS FROM REFERRING FILE SYSTEMS

5 A first file system includes a data object that
references a second file system. The data object can be
a new or existing file type with data identifying the
second file system or some of its properties. The data
required to locate the second file system is stored in a
10 file system location data structure that may be located
outside the first file system. The data object may then
contain a key value, such as a name or a number,
identifying the second file system, that can be used to
look up the file system location. A referencing server
15 may encode the file system identification and include the
encoded file system identification rather than a path.
When a server receives a request with a path that is
encoded, the server decodes the file system
identification. Then, the server may locate the root of
20 the file system identified by the file system
identification and return the root object to the client.
Location of the root can be done either by accessing the
file system location data structure or by using another
data structure. A root referral object is the top level
25 object in all participating file servers. It contains a
referral to a root file system identification, which is
the root file system. Since all participating file

systems contain the same root file system identification, all clients will view the same name space regardless of which file server is initially contacted.